



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/058,960	01/30/2002	Masahiko Yahagi	Q68321	4641

7590 08/24/2005

SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC  
2100 Pennsylvania Avenue, N.W.  
Washington, DC 20037-3213

EXAMINER

PHAN, HUY Q

ART UNIT	PAPER NUMBER
----------	--------------

2687

DATE MAILED: 08/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/058,960	YAHAGI, MASAHIKO	
	Examiner	Art Unit	
	Huy Q. Phan	2687	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 July 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2-4, 6-8 and 10-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-4, 6-8 and 10-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Amendment***

1. This Office Action is in response to Amendment filed on date: 07/25/2005.  
Claims 2-4, 6-8 and 10-19 are still pending.

### ***Response to Arguments***

2. Applicant's arguments with respect to claims 2-4, 6-8 and 10-19 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 2, 3, 6, 7, 10, 11 and 13-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Einola et al. (US-6,771,964 B1).

Regarding claim 2, Einola et al. disclose a method of establishing a connection to a desired communications network (abstract), comprising the steps of:

sending a request signal to each of a plurality of communications networks  
(abstract; for more details see figs 1-2 and cols. 4-8);

receiving response signals from said communications networks (“Information relating to the communication characteristics of the neighboring wireless network is also sent from the serving wireless network to the mobile station” and “the mobile station receives radio signals from the neighboring wireless network” see abstract; for more details see figs 1-2 and cols. 4-8);

indicating the received response signals (“The quality of the radio signals between the mobile station and the neighboring wireless network is measured” see abstract; for more details see figs 1-2 and cols. 4-8);

allowing a user to select one of said plurality of networks based on the indicated response signals (“for the mobile station pursuant to the handover request” see abstract; for more details see figs 1-2 and cols. 4-8); and

establishing a connection to the selected communications network (“the neighboring wireless network has established a communication channel for the mobile station pursuant to the handover request” see abstract; for more details see figs 1-2 and cols. 4-8), wherein said response signals indicate traffic congestion level for each of said plurality of communications networks (col. 3, lines 13-37).

Regarding claim 3, Einola et al. disclose the method of claim 2, wherein said response signal indicates information concerning a communication service of each of said communications networks (col. 3, lines 13-37).

Regarding claim 6, Einola et al. disclose the communication terminal (fig. 1, MS 16) comprising:

a network interface (MS 16; fig. 1 and its description) for sending a request signal to each of a plurality of communications networks and for receiving response signals from said communications networks ("Information relating to the communication characteristics of the neighboring wireless network is also sent from the serving wireless network to the mobile station" and "the mobile station receives radio signals from the neighboring wireless network" see abstract; for more details see figs 1-2 and cols. 4-8); and

a user interface (MS 16; fig. 1 and its description) for indicating the received response signals to allow a user to enter a command signal based on the indicated response signals ("MS 16 requests" see [0036]) and selecting one of said plurality of networks according to the entered command signal ("for the mobile station pursuant to the handover request" see abstract; for more details see figs 1-2 and cols. 4-8); and

said network interface establishing a connection to one of said plurality of networks which is selected by said user interface ("The quality of the radio signals between the mobile station and the neighboring wireless network is measured....for the mobile station pursuant to the handover request" see abstract; for more details see figs 1-2 and cols. 4-8), wherein said response signals indicate traffic congestion level for each of said plurality of communications networks (col. 3, lines 13-37).

Regarding claim 7, Einola et al. disclose the communication terminal of claim 6,

wherein said response signal indicates information concerning a communication service of each of said communications networks (col. 3, lines 13-37).

Regarding claim 10, Einola et al. disclose a communication system (fig. 1, system 10) comprising:

a plurality of wireless networks (fig. 1 and its description), each of the wireless networks producing a response signal upon receipt of a request signal ("Information relating to the communication characteristics of the neighboring wireless network is also sent from the serving wireless network to the mobile station" and "the mobile station receives radio signals from the neighboring wireless network" see abstract; for more details see figs 1-2 and cols. 4-8); and

a wireless terminal (MS 16; fig. 1 and its description) comprising:

a wireless interface (MS 16; fig. 1 and its description) for sending said request signal to each of said plurality of wireless networks and for receiving response signals from said wireless networks ("Information relating to the communication characteristics of the neighboring wireless network is also sent from the serving wireless network to the mobile station" and "the mobile station receives radio signals from the neighboring wireless network" see abstract; for more details see figs 1-2 and cols. 4-8);

a user interface (MS 16; fig. 1 and its description) for indicating the received response signals ("The quality of the radio signals between the mobile station and the neighboring wireless network is measured" see abstract; for more details see figs 1-2 and cols. 4-8), allowing a user to enter a command signal based on the indicated

response signals and selecting one of said wireless networks according to the entered command signal ("for the mobile station pursuant to the handover request" see abstract; for more details see figs 1-2 and cols. 4-8), said wireless interface establishing a connection to one of said wireless networks which is selected by said user interface ("the neighboring wireless network has established a communication channel for the mobile station pursuant to the handover request" see abstract; for more details see figs 1-2 and cols. 4-8), wherein said response signals indicate traffic congestion level for each of said plurality of communications networks (col. 3, lines 13-37).

Regarding claim 11, Einola et al. disclose the communication system of claim 10, wherein said response signal indicates information concerning a communication service of each of said communications networks (col. 3, lines 13-37).

Regarding claim 13, Einola et al. disclose the method of performing a handover operation (abstract; for more details see figs 1-2 and cols. 4-8), comprising the steps of:

    sending a handover request signal to each of a plurality of wireless networks (abstract; for more details see figs 1-2 and cols. 4-8);

    receiving a response signal from each of said plurality of wireless networks ("Information relating to the communication characteristics of the neighboring wireless network is also sent from the serving wireless network to the mobile station" and "the mobile station receives radio signals from the neighboring wireless network" see

abstract; for more details see figs 1-2 and cols. 4-8), the response signal of each wireless network indicating traffic congestion level of the network [0042];

selecting one of said plurality of wireless networks based on response signals received from said wireless networks ("The quality of the radio signals between the mobile station and the neighboring wireless network is measured" see abstract; for more details see figs 1-2 and cols. 4-8); and

establishing a connection to the selected wireless network ("the neighboring wireless network has established a communication channel for the mobile station pursuant to the handover request" see abstract; for more details see figs 1-2 and cols. 4-8).

Regarding claim 14, Einola et al. disclose a mobile terminal (MS 16; fig. 1 and its description) comprising:

a wireless interface (MS 16; fig. 1 and its description) for sending a handover request signal to each of a plurality of wireless networks and receiving a response signal from each of said plurality of wireless networks ("Information relating to the communication characteristics of the neighboring wireless network is also sent from the serving wireless network to the mobile station" and "the mobile station receives radio signals from the neighboring wireless network" see abstract; for more details see figs 1-2 and cols. 4-8), the response signal of each wireless network indicating traffic congestion level of the network (col. 3, lines 13-37); and



control circuitry (MS 16; fig. 1 and its description) for selecting one of said plurality of wireless networks based on the response signals received from said networks ("for the mobile station pursuant to the handover request" see abstract; for more details see figs 1-2 and cols. 4-8), said wireless interface establishing a connection to the wireless network selected by the control circuitry ("the neighboring wireless network has established a communication channel for the mobile station pursuant to the handover request" see abstract; for more details see figs 1-2 and cols. 4-8).

Regarding claim 15, Einola et al. disclose the communication system (fig. 1 and its description) comprising:

a plurality of wireless networks (fig. 1 and its description), each of said networks producing a response signal upon receipt of a handover request signal which indicates traffic congestion level of the network (col. 3, lines 13-37); and

a wireless terminal (MS 16; fig. 1 and its description) comprising:

a wireless interface (MS 16; fig. 1 and its description) for sending said handover request signal to said wireless networks and receiving said response signals from said wireless networks ("Information relating to the communication characteristics of the neighboring wireless network is also sent from the serving wireless network to the mobile station" and "the mobile station receives radio signals from the neighboring wireless network" see abstract; for more details see figs 1-2 and cols. 4-8); and

control circuitry (MS 16; fig. 1 and its description) for selecting one of said wireless networks based on the received response signals ("for the mobile station pursuant to the handover request" see abstract; for more details see figs 1-2 and cols. 4-8), said wireless interface establishing a connection to one of said wireless networks which is selected by said control circuitry ("the neighboring wireless network has established a communication channel for the mobile station pursuant to the handover request" see abstract; for more details see figs 1-2 and cols. 4-8).

Regarding claim 16, Einola et al. disclose a method of establishing a connection to a selected network ("the neighboring wireless network has established a communication channel for the mobile station pursuant to the handover request" see abstract; for more details see figs 1-2 and cols. 4-8), comprising the steps of:

receiving, at a first communications network ("A message is sent from a mobile station of a user to the serving wireless network"), a connection request from a user terminal (abstract; for more details see figs 1-2 and cols. 4-8);

sending a request signal from said first communications network to a traffic management center (col. 3, lines 13-37) if said connection request encounters a traffic congestion (figs. 1-2 and their descriptions); and

sending a rerouting message from the center to said user terminal via said first communications network for identifying a second communications network (abstract; for more details see figs 1-2 and cols. 4-8) whose congestion level is lower than a predefined threshold level to thereby allow a user to send a connection request to said

second communications network ("for the mobile station pursuant to the handover request" see abstract; for more details see figs 1-2 and cols. 4-8).

Regarding claim 18, Einola et al. disclose a communication system (fig. 1 and its description) comprising:

a traffic management center (col. 3, lines 13-37); and

a plurality of communications networks (fig. 1 and its description), a first one of the communications networks receiving a connection request from a user terminal ("A message is sent from a mobile station of a user to the serving wireless network") and sending a request signal to said traffic management center (abstract; for more details see figs 1-2 and cols. 4-8) when a traffic congestion is encountered in said first communications network and receiving a rerouting message from said center (col. 3, lines 13-37), and sending the received rerouting message to said user terminal to allow a user to establish a connection to a network identified by the rerouting message ("Information relating to the communication characteristics of the neighboring wireless network is also sent from the serving wireless network to the mobile station" and "the mobile station receives radio signals from the neighboring wireless network" see abstract; for more details see figs 1-2 and cols. 4-8), said traffic management center responding to said request signal by returning said rerouting message to said first communications network (abstract; for more details see figs 1-2 and cols. 4-8), the rerouting message identifying a second one of said networks whose congestion level is

lower than a predefined threshold level (see col. 3, lines 13-37 and abstract; for more details see figs 1-2 and cols. 4-8).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4, 8, 12, 17 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Einola et al. in view of Vazvan et al. (US-6,400,946 B1).

Regarding claims 4, 8, 12, 17 and 19, Einola et al. disclose all the limitations of the previous rejections. But, Einola et al. lack to especially recite wherein said information indicates tariff of each of said communications networks and wherein said second communications network has a least routing cost. However in analogous art, Vazvan et al. teach wherein said information indicates tariff of each of said communications networks (Vazvan et al.'s summary of the invention) and the terminal being capable to select the cheapest system (col. 2, line 60-col. 3, line 12). Since, Einola et al. and Vazvan et al. are related to the method of communication between the mobile terminal and plurality of wireless communication systems; therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Einola et al. as taught by Vazvan et al. for purpose of "it gives the mobile terminal full freedom to decide which network's radio channel to choose"

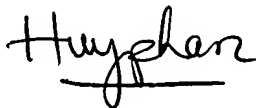
(see Vazvan et al.'s summary of the invention) in order to allow the user with capability of selecting the cheapest wireless communication network.

**Conclusion**

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Huy Q Phan whose telephone number is 571-272-7924. The examiner can normally be reached on 8AM-6PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kincaid G Lester can be reached on 571-272-7922. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**SONNY TRINH**  
**PRIMARY EXAMINER**